

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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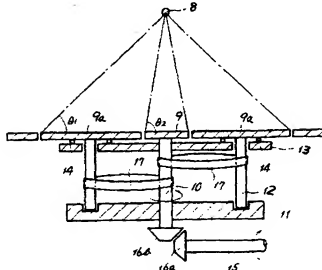
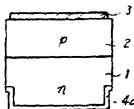
APPLICATION DATE : 21-08-81  
APPLICATION NUMBER : 56132355

APPLICANT : MITSUBISHI ELECTRIC CORP;

INVENTOR : KITABI SHIGERU;

INT.CL. : H01L 33/00 H01L 21/285

TITLE : MANUFACTURE OF LIGHT EMITTING DIODE



ABSTRACT : PURPOSE: To prevent extraordinary emission of light from a light emitting diode by depositing on a wafer formed with a recess groove on the back surface while rotating the wafer around its own axis and around a vertical line to a plane as a center in the region disposed in the prescribed range at the desired attack angle to form the second metal electrode at the back surface side.

CONSTITUTION: The second conductive type semiconductor layer 2 is formed on the first conductive type semiconductor substrate 1, the second conductive type low specific resistance semiconductor layer and a metal film are covered on the surface of the layer 2, and the metal film is divided into a plurality of independent first metal electrodes 3. Then, a recess groove is formed on the back surface of the substrate 1, and the metal film is covered on the inner wall surface of the groove, thereby forming the second metal electrode 4a. To form the second metal electrode 4a, the wafer is mounted on the plane 9 oppositely to a deposition source 8 of the electrode metal, and is rotated around its own axis in a plane parallel to the plane 9 in the range 9a in the range of desired attack angle of the source 8 and around a vertical line to the plane 9 as a center.

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